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**DEPARTMENT OF EDUCATION**  
BULLETIN, 1916, No. 9 . . . . . WHOLE NUMBER 9

PROMOTION AND RETARDATION  
IN THE  
ELEMENTARY SCHOOLS OF PORTO RICO

C. MINOT GRIFFITH, A. M.,  
STATISTICIAN, DEPARTMENT OF EDUCATION



SAN JUAN, P. R.  
BUREAU OF SUPPLIES, PRINTING, AND TRANSPORTATION  
1916



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## PREFACE.

During the past decade considerable attention has been given by those who administer and supervise education to the study of retardation, overage, promotion and other data bearing directly upon results secured in the classroom. Statistics are of little or no value unless they lead to an improvement of the unsatisfactory conditions they reveal. For the first time in the history of the school system now in vogue in Porto Rico, data have been gathered by the department relating to the matter of promotion and retardation. The figures are given in Tables IV, VIII and IX of the Commissioner's report to the Governor of Porto Rico, covering the fiscal year ended June 30, 1916. I considered the facts therein revealed of such importance to all supervisors and teachers, that I requested Mr. C. M. Griffith to prepare a special bulletin dealing with these problems. He has made a careful investigation and has presented some interesting facts, conclusions and recommendations, which I submit to the study and application of all supervisors and teachers in the service.

Closely connected with the problem of retardation is that dealing with overage. Undoubtedly, overage in Porto Rican schools is not always due to retardation. Many children do not get an opportunity to enter school at an early age because facilities are still so limited. Last year 900 pupils attended the first grade of the urban system at the age of 10; 365 at 11; 302 at 12; 93 at 13; 36 at 14; 10 at 15; 5 at 16, and 1 at 17. In rural schools the facts are even more striking: 3,154 pupils of the age of 10 attended the first grade; 1,442 at 11; 1,245 at 12; 434 at 13; 212 at 14; 97 at 15; 52 at 16; 11 at 17; 1 at 18, and 1 at 19.

However, overage should not be attributed merely to lack of facilities. In addition to the recommendations made by the author of this bulletin, I wish to quote certain remedies set forth by Miss Janet R. Rankin, School Service Secretary, State Department of Public Instruction, Madison, Wisconsin. These remedies apply to the problem of retardation and are as good in Porto Rico as elsewhere. They are as follows:

"GOOD INSTRUCTION is perhaps the best means of eliminating overage. The child who is well taught learns. The child who is poorly taught, whose lessons are presented to him in a bookish,

abstract, formal manner, cannot learn except as memorizing facts may be considered learning. The teacher who is a good teacher will get in touch with every pupil in her room and will inspire each with the desire to achieve and a belief in his power of achievement.

"GOOD ATTENDANCE will help materially to decrease overage. The child who does not come to school cannot be taught. Normally he does not learn, in the school sense. The truant officer may be able to be of assistance in getting children to the doors of the schoolroom. From there on their problem must be met by the teacher. A large percentage of truancy may be an evidence of school failure to arouse the interest of the children.

"GOOD DISCIPLINE will decrease overage. By good discipline is not meant the militaristic discipline of immobility in which children are expected to sit quietly during the whole length of the school session, to speak when spoken to and never to move without permission. Good discipline means rather the discipline of interest in which real tasks to do engender quietness, in which all noise and movement center round the work of the schoolroom, and in which interest and activity make for controlled movement.

"GOOD SUPERVISION must be mentioned. Unless grade is correlated with grade, building with building, teacher with teacher, the school system will not be conducive to normal progress of children through the grades. Unless the teacher is given help and encouragement in her work she is likely to feel that she is struggling against overwhelming odds and may relax into antiquated methods of discipline and promotion."

My earnest desire is that teachers and supervisors in the service will put forth their best efforts towards making the school do the work it is intended to do with the least possible loss of time, effort and money. Remember that the child that is not promoted to the next higher grade represents a waste in the expenditure of public funds.

PAUL G. MILLER,  
*Commissioner of Education.*

## PROMOTION AND RETARDATION IN THE ELEMENTARY SCHOOLS OF PORTO RICO.

Table I was compiled from reports of practically the same form from each of the 2,289 elementary-school teachers of the Island in charge of grades. They were made out in most cases with evident care; but, as always, there were some unbalanced reports, and this table gives evidence of other errors due to misunderstandings and carelessness on the part of some teachers. Still the writer believes, after having tabulated the 1,335 reports from urban schools and 3,900 from rural schools (one from each teacher on every grade under his charge), that the percentage of errors is small—as small as in any similar statistical collection.

*Promotions.*—Table II shows that the per cent of promotions during the year 1915–16 was 59.4 in urban schools and 58.9 in rural schools—practically 59 per cent in both cases. In making these computations twice-promoted pupils—those promoted in the course of the year and again at its close—have been counted twice in both promotions and enrollment. They figure in two different grades. It should be noted also that these tables are not based on the number belonging at the end of the year, but on the total enrollment during the year, including both late entries and those who left school at some time during the year. It seemed best to make the total enrollment the basis so that the reports would include pupils who were promoted during the year and who left school before its close. There are many groups in the larger towns in which promotions are regularly made at some time during the year as a result of the flexible-promotion plan which was in force from 1909 to 1914 and which provided for promotions at the end of each six weeks.

TABLE I.—*Promotion, retardation and distribution of attendance for the year 1915-16.*

#### A. ELEMENTARY URBAN SCHOOLS.

EIGHTH GRADE.

Days attended this year	Enrollment	Pupils promoted	Terms promoted pupils were in the grade this year or previously						Not promoted						Terms non-promoted pupils were in the grade this year or previously							
			1			2			3			4			5			6				
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
40-62	1,963	1,595	26	1,307	26	1	125	11	358	6	7	311	3	1	29	1	1	1	1	1	1	
20-39		92	3	74	1	1	13	4	82	9	9	57	1	1	13	1	1	1	1	1	1	
00-19		82	32	8	20	1	1	4	50	1	1	18	24	1	5	2	5	2	5	2	5	
90-99		85	4	19	53	1	1	6	66	6	6	31	22	1	4	3	3	3	3	3	3	
80-79		123	19	3	6	9	1	1	104	6	6	37	25	1	2	2	2	2	2	2	2	
70-59		103	13	5	4	3	1	3	90	16	16	3	3	1	1	2	2	2	2	2	2	
60-39		74	5	4	1	1	1	1	69	48	4	5	6	1	1	2	2	2	2	2	2	
19		74	1	1	1	1	1	1	73	66	3	2	2	1	1	1	1	1	1	1	1	
Twice promoted		89	89	27	62	1,558	28	3	152	12	892	215	450	17	11	58	9	9	9	9	9	9
Total		2,823	1,931	27	62	1,558	28	3	152	12	892	215	450	17	11	58	9	9	9	9	9	9

SEVENTH GRADE.

PROMOTION AND RETARDATION.

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SIXTH GRADE.

140-162.....	2,845	2,203	3	48	1,056	47	7	134	8	642	7	546	26	8	54	1	.....	
120-139.....	307	165	7	122	7	6	23	6	142	11	110	8	6	7	1	.....		
100-119.....	68	68	13	44	3	2	6	107	107	34	57	7	4	1	1	.....		
80-99.....	175	66	1	23	39	1	2	129	129	76	35	3	8	2	2	.....		
60-79.....	195	60	1	18	39	10	8	192	192	31	92	16	2	7	7	.....		
40-59.....	252	30	5	5	5	1	1	118	118	62	33	14	9	5	5	.....		
20-39.....	148	11	5	5	5	1	1	110	110	4	17	5	1	1	1	.....		
1-19.....	130	106	6	1	5	5	5	100	100	5	11	3	1	1	1	.....		
Twice promoted.....	118	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Total.....	4,276	2,727	16	114	2,220	68	17	165	9	1,549	270	261	884	77	28	76	3	.....

FIFTH GRADE.

140-162.....	3,748	2,979	56	24	2,467	156	68	202	6	769	7	16	639	20	20	65	2	.....
120-139.....	454	2,263	12	90	1,13	8	13	27	5	191	5	23	143	4	4	11	1	.....
100-119.....	252	111	2	39	48	10	5	5	2	141	5	42	12	5	5	6	6	.....
80-99.....	280	136	4	49	60	5	10	8	8	144	18	36	3	3	3	7	7	.....
60-79.....	261	92	7	40	40	2	4	2	1	169	32	90	43	7	7	3	3	.....
40-59.....	247	44	14	14	14	7	16	2	2	203	106	67	26	8	8	1	1	.....
20-39.....	174	26	12	1	10	2	1	1	1	148	106	30	16	6	6	1	1	.....
1-19.....	127	19	13	4	4	2	2	2	1	108	92	6	4	4	4	1	1	.....
Twice promoted.....	48	48	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	5,591	3,718	120	190	2,818	189	97	246	10	1,873	371	350	948	64	44	93	3	.....

## DEPARTMENT OF EDUCATION.

TABLE I.—*Promotion, retardation and distribution of attendance for the year 1915-16—Continued.*

## A. ELEMENTARY URBAN SCHOOLS—Continued.

## FOURTH GRADE.

Days attended this year	Enroll- ment	Pupils pro- moted	Terms promoted pupils were in the grade this year or previously						Not promo- ted						Terms non-promoted pupils were in the grade this year or previously					
			1	2	3	4	5	6	9	12	15	1	2	3	4	5	6	9	12	15
140-162	3,861	5	62	3,072	316	62	326	5	...	...	...	1,249	26	38	23	19	153	4	...	...
120-139	727	398	2	29	281	31	8	48	1	...	...	329	2	38	223	13	9	39	5	...
100-119	353	161	2	29	82	18	14	14	2	...	...	192	5	81	75	9	10	11	1	...
80-99	379	174	4	43	98	12	12	10	1	...	...	205	8	94	58	15	13	17	...	...
60-79	310	92	8	20	47	10	2	4	1	...	...	218	48	108	36	9	10	6	1	...
40-59	280	66	11	4	34	10	7	7	...	...	...	214	41	22	12	2	3	4	...	...
20-39	269	43	15	2	20	4	2	...	...	...	...	226	165	20	27	6	3	4	...	...
1-19	169	20	4	...	15	1	...	...	...	...	...	149	107	16	14	9	1	2	...	...
Twice promoted	69	69	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	7,656	4,874	49	189	3,614	402	100	412	9	...	...	2,782	496	421	1,450	102	67	235	11	...

## THIRD GRADE.

Days attended this year	Enroll- ment	Pupils pro- moted	Terms promoted pupils were in the grade this year or previously						Not promo- ted						Terms non-promoted pupils were in the grade this year or previously					
			1	2	3	4	5	6	9	12	15	1	2	3	4	5	6	9	12	15
140-162	6,230	4,663	3	74	3,550	250	127	637	22	...	...	1,567	2	10	1,251	69	37	176	12	...
120-139	912	562	1	25	372	31	22	97	4	...	...	360	3	19	257	15	5	60	12	...
100-119	520	265	1	53	136	26	16	32	1	...	...	255	2	102	102	14	10	24	1	...
80-99	608	295	1	8	131	33	12	37	1	...	...	313	11	159	108	10	13	12	...	...
60-79	380	129	13	32	42	15	16	10	1	...	...	251	39	110	63	14	11	14	...	...
40-59	463	167	19	17	95	15	9	9	3	...	...	296	123	33	67	30	3	19	1	...
20-39	352	63	18	5	22	14	2	...	...	...	...	289	172	30	46	29	6	7	2	...
1-19	219	33	12	3	11	3	4	...	...	...	...	186	123	19	20	19	2	2	1	...
Twice promoted	90	90	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	9,774	6,257	67	290	4,359	387	204	828	31	1	...	3,517	475	502	1,914	200	86	324	16	...

## PROMOTION AND RETARDATION.

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## SECOND GRADE.

		SECOND GRADE.											
		190-162						120-139					
		140-162	120-139	100-119	80-99	60-79	40-59	20-39	1-19	Twice promoted	Total		
		7,403	5,178	55	50	3,578	343	205	912	135	20	2,225	22
		1,242	742	1	54	464	54	21	128	34	4	500	2
		650	817	.....	85	157	25	12	30	13	8	330	6
		589	239	7	87	25	34	12	14	17	3	850	27
		510	182	10	77	46	15	14	17	3	.....	328	60
		585	193	34	22	78	12	40	7	.....	.....	168	47
		354	61	16	4	29	6	1	5	4	.....	293	149
		284	25	5	1	9	5	1	4	.....	.....	209	115
		15	15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		11,582	6,952	128	372	4,448	385	314	1,120	170	.....	4,630	574
		Total										610	2,349

## FIRST GRADE.

		FIRST GRADE.											
		190-162						120-139					
		140-162	120-139	100-119	80-99	60-79	40-59	20-39	1-19	Twice promoted	Total		
		9,663	5,746	1	20	3,239	235	217	1,64	384	4	2	3,917
		1,918	940	3	36	420	37	20	25	51	1	1	1,078
		960	344	16	134	155	15	19	68	13	6	616	13
		1,129	363	18	90	10	34	65	12	2	.....	766	58
		829	169	37	23	67	20	14	17	20	13	660	123
		791	172	30	55	22	5	18	12	12	12	619	315
		582	90	21	5	18	21	3	7	6	6	492	38
		391	27	14	2	5	3	2	1	1	1	364	262
		16,263	7,751	119	358	4,002	357	315	2,099	492	6	3	8,512
		Total										1,151	1,414

## TOTAL IN ELEMENTARY URBAN SCHOOLS.

		TOTAL IN ELEMENTARY URBAN SCHOOLS.											
		190-162						120-139					
		140-162	120-139	100-119	80-99	60-79	40-59	20-39	1-19	Twice promoted	Total		
		39,015	27,867	134	370	20,660	1,281	742	4,069	575	4	2	11,148
		6,000	3,926	13	198	2,084	172	91	631	76	1	2,775	34
		3,128	1,342	9	315	665	97	69	165	22	2	1,062	137
		3,512	1,450	38	480	587	88	93	111	21	.....	2,062	137
		2,806	1,737	69	372	249	57	50	56	19	.....	2,034	977
		40,59	22,737	711	139	86	294	57	47	17	.....	2,026	1,028
		20,29	10,293	909	106	17	105	51	8	14	1	1,714	126
		1,402	139	55	6	51	15	1	10	1	.....	1,263	939
		509	509	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		61,132	36,324	563	1,739	24,686	1,892	1,114	5,153	798	7	3	24,808
		Total										3,774	3,891

		TOTAL IN ELEMENTARY URBAN SCHOOLS.											
		190-162						120-139					
		140-162	120-139	100-119	80-99	60-79	40-59	20-39	1-19	Twice promoted	Total		
		140-162	120-139	100-119	80-99	60-79	40-59	20-39	1-19	Twice promoted	Total		
		140-162	120-139	100-119	80-99	60-79	40-59	20-39	1-19	Twice promoted	Total		

## DEPARTMENT OF EDUCATION.

TABLE I.—*Promotion, retardation and distribution of attendance for the year 1915-16—Continued.*

## B. RURAL SCHOOLS.

## FIFTH GRADE.

Days attended this year	Enroll- ment	Pupils pro- moted	Terms promoted pupils were in the grade this year or previously						Not pro- moted						Terms non-promoted pupils were in the grade this year or previously					
			1	2	3	4	5	6	9	12	1	2	3	4	5	6	9	12		
			1	2	3	4	5	6	9	12	1	2	3	4	5	6	9	12		
140-162	410	352	9	7	29	10	2	31	1	88	2	3	75	1	1	6	1	...		
120-139	112	68	1	46	10	1	11	2	44	3	31	3	26	1	1	5	1	...		
100-119	65	29	8	19	12	12	2	2	36	9	15	12	1	1	1	1	1	...		
80-99	50	20	8	12	1	2	6	1	30	8	10	8	1	1	1	1	1	...		
60-79	42	12	1	2	1	1	1	1	36	16	4	7	5	3	1	1	1	...		
40-59	39	3	1	1	1	1	1	1	33	24	2	4	3	1	1	1	1	...		
20-39	36	3	1	1	1	1	1	1	21	15	1	4	1	1	1	1	1	...		
1-19	21	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	...		
Twice promoted	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	...		
Total . . . . .	806	498	4	26	383	20	5	48	1	318	65	47	167	15	8	15	1	...		

## FOURTH GRADE.

Days attended this year	Enroll- ment	Pupils pro- moted	Terms promoted pupils were in the grade this year or previously						Not pro- moted						Terms non-promoted pupils were in the grade this year or previously					
			1	2	3	4	5	6	9	12	1	2	3	4	5	6	9	12		
			1	2	3	4	5	6	9	12	1	2	3	4	5	6	9	12		
140-162	4,538	3,649	6	40	2,848	38	44	44	66	1	889	7	19	767	13	11	62	10	...	
120-139	1,438	931	3	28	674	11	17	175	59	1	507	6	27	387	12	12	54	9	...	
100-119	606	362	1	43	138	13	15	59	14	1	264	6	76	141	6	10	17	5	...	
80-99	303	233	1	78	87	9	18	38	2	1	270	11	126	86	7	16	19	5	...	
60-79	425	148	6	41	29	13	23	23	13	1	277	61	140	45	7	12	9	3	...	
40-59	351	91	19	11	20	18	2	11	10	1	260	114	69	38	22	3	11	3	...	
20-39	225	53	19	2	10	15	2	2	2	3	172	116	14	26	12	3	3	1	...	
1-19	170	16	5	2	5	2	2	2	2	2	154	95	3	36	15	3	3	2	...	
Twice promoted	42	42	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	...	
Total . . . . .	8,298	5,505	69	243	3,868	122	121	917	132	1	2,793	416	474	1,326	94	64	178	41	...	

## PROMOTION AND RETARDATION.

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THIRD GRADE.

	Total.....	15,964	10,348	109	483	7,447	246	225	1,514	190	4	5,616	780	846	3,295	159	133	381	80	2
140-162.....	9,036	6,973	10	52	5,554	93	97	1,036	129	2	2,063	19	57	1,735	38	29	171	15	21	1
120-139.....	2,820	1,810	4	84	1,284	45	44	306	41	2	1,010	8	58	795	12	16	105	15	15	1
100-119.....	1,168	601	7	124	335	17	28	86	9	2	567	18	134	380	19	20	38	8	8	1
80-99.....	878	389	127	145	19	35	49	35	7	6	489	36	154	239	19	22	11	11	11	1
60-79.....	671	200	5	73	69	22	16	16	16	6	471	96	224	82	19	24	18	8	8	1
40-59.....	610	150	41	19	38	32	5	10	5	5	460	225	91	78	30	16	13	16	5	5
20-39.....	421	85	30	15	27	10	10	10	10	10	366	218	39	39	4	16	5	4	4	4
1-19.....	239	19	10	1	5	3	3	3	3	3	230	165	14	19	10	3	5	5	4	4
T twice promoted.....	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121
Total.....	15,964	10,348	109	483	7,447	246	225	1,514	190	4	5,616	780	846	3,295	159	133	381	80	2	

SECOND GRADE.

	Total.....	22,313	15,138	175	727	10,664	433	361	2,303	298	8	7,175	878	1,060	4,028	216	17,	658	159	1
140-162.....	12,760	9,958	38	121	7,743	242	152	1,483	179	2	2,802	24	89	2,255	49	34	301	50	50	1
120-139.....	3,966	2,742	10	116	1,862	64	72	515	73	2	1,294	12	100	874	33	15	171	29	29	1
100-119.....	1,725	998	4	159	159	25	49	49	26	5	127	13	181	388	12	28	89	15	15	1
80-99.....	1,118	549	13	190	197	30	46	68	68	5	639	39	281	184	29	40	41	26	26	1
60-79.....	910	322	18	103	102	29	30	35	35	5	588	105	256	134	32	29	25	17	17	1
40-59.....	751	220	42	32	101	12	10	18	18	5	531	266	89	97	32	21	16	10	10	1
20-39.....	506	126	40	5	43	23	2	10	3	2	380	213	51	60	33	6	7	10	10	10
1-19.....	330	46	1	21	8	8	8	2	2	4	284	206	13	36	16	2	8	3	3	3
T twice promoted.....	177	177	177	177	177	177	177	177	177	177	177	177	177	177	177	177	177	177	177	177
Total.....	22,313	15,138	175	727	10,664	433	361	2,303	298	8	7,175	878	1,060	4,028	216	17,	658	159	159	1

FIRST GRADE.

	Total.....	38,112	19,497	375	1,060	8,933	730	871	5,384	2,066	78	19,615	3,074	3,634	8,417	659	557	2,361	881	32
140-162.....	18,264	12,010	101	131	6,032	351	414	3,651	1,291	39	6,254	81	144	4,114	199	148	11,160	368	10	
120-139.....	8,709	3,360	8	180	557	63	76	317	153	6	3,210	37	511	1,925	107	104	391	169	8	
100-119.....	6,919	1,058	3	180	20	350	53	147	82	6	1,998	55	946	937	75	75	227	116	9	
80-99.....	3,358	3,336	647	54	191	149	42	57	109	44	1,162	134	511	626	53	53	137	68	2	
60-79.....	2,743	2,196	95	65	159	52	21	51	34	2	2,096	418	1,007	353	51	51	122	60	2	
40-59.....	1,427	1,73	52	19	43	20	9	20	9	1	1,747	919	376	225	75	75	32	44	45	1
20-39.....	869	61	12	12	22	10	1	10	6	1	1,254	891	135	138	72	72	15	47	26	1
1-19.....	1-19.....	1-19.....	1-19.....	1-19.....	1-19.....	1-19.....	1-19.....	1-19.....	1-19.....	1-19.....	1-19.....	1-19.....	1-19.....	1-19.....	1-19.....	1-19.....	1-19.....	1-19.....	1-19.....	1-19.....
Total.....	38,112	19,497	375	1,060	8,933	730	871	5,384	2,066	78	19,615	3,074	3,634	8,417	659	557	2,361	881	32	

TABLE I.—*Promotion, retardation and distribution of attendance for the year 1915-16—Continued.*

B. RURAL SCHOOLS—Continued.

### TOTAL IN RURAL SCHOOLS.

## PROMOTION AND RETARDATION.

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TABLE II.—*Promotion, retardation and distribution of attendance on the basis of 1,000 for each attendance period for 1915–16.*

## A. URBAN SCHOOLS.

## EIGHTH GRADE.

Days attended	Promo- tions	Years promoted pupils were in grade			Not promo- ted	Years non-promoted pupils were in grade		
		1 or less	2	3		1 or less	2	3
140-162.....	817	733	78	6	188	166	16	1
120-139.....	529	443	86	.....	171	379	86	6
100-119.....	390	341	49	.....	610	524	86	.....
80-99.....	563	503	53	7	437	391	46	.....
60-79.....	154	146	8	.....	846	789	49	8
40-59.....	126	97	29	.....	874	796	58	20
20-39.....	68	68	.....	.....	932	770	108	54
1-19.....	11	14	.....	.....	986	892	40	54
Total.....	684	615	65	4	316	282	31	3

## SEVENTH GRADE.

140-162.....	797	709	86	2	208	177	26	.....
120-139.....	650	590	60	.....	350	312	38	.....
100-119.....	324	302	22	.....	676	602	74	.....
80-99.....	508	481	27	.....	492	425	56	11
60-79.....	206	192	14	.....	794	667	127	.....
40-59.....	217	192	17	8	783	700	83	.....
20-39.....	114	80	34	.....	886	829	57	.....
1-19.....	98	86	12	.....	902	817	73	12
Total.....	665	596	67	2	335	295	39	1

## SIXTH GRADE.

140-162.....	774	725	66	3	226	194	31	1
120-139.....	537	420	117	.....	462	394	69	.....
100-119.....	389	326	63	.....	611	520	86	5
80-99.....	338	323	15	.....	662	595	67	.....
60-79.....	238	230	8	.....	762	663	99	.....
40-59.....	203	185	68	.....	797	736	61	.....
20-39.....	85	77	8	.....	915	861	46	8
1-19.....	57	57	.....	.....	943	906	37	.....
Total.....	638	578	58	2	362	319	42	1

## FIFTH GRADE.

140-162.....	759	679	114	2	205	176	28	1
120-139.....	579	474	105	.....	421	377	42	2
100-119.....	440	353	79	8	560	469	91	.....
80-99.....	486	404	82	.....	514	468	46	.....
60-79.....	352	333	15	4	648	594	54	.....
40-59.....	178	150	28	.....	822	765	57	.....
20-39.....	149	132	11	6	851	810	41	.....
1-19.....	150	134	16	.....	850	803	47	.....
Total.....	665	568	95	2	335	298	36	1

TABLE II.—*Promotion, retardation and distribution of attendance on the basis of 1,000 for each attendance period for 1915-16—Continued.*

## A. URBAN SCHOOLS—Continued.

## FOURTH GRADE.

Days attended	Promo-tions	Years promoted pupils were in grade			Not promo-ted	Years non-promoted pupils were in grade		
		1 or less	2	3		1 or less	2	3
140-162.....	755	615	139	1	245	206	39	.....
120-139.....	547	426	120	1	453	362	84	7
100-119.....	456	320	130	6	514	456	85	3
80-99.....	459	369	90	.....	541	422	119	.....
60-79.....	297	242	52	3	703	619	81	3
40-59.....	236	175	61	.....	764	703	61	.....
20-39.....	160	138	22	.....	840	792	48	.....
1-19.....	118	112	6	.....	882	811	71	.....
Total.....	637	517	119	1	363	309	53	1

## THIRD GRADE.

140-162.....	748	582	163	3	252	203	47	2
120-139.....	605	445	164	6	395	306	88	1
100-119.....	510	366	142	2	490	396	92	2
80-99.....	485	350	155	.....	515	457	58	.....
60-79.....	340	229	108	3	660	558	102	.....
40-59.....	361	283	71	7	639	525	112	2
20-39.....	179	128	51	.....	821	705	116	.....
1-19.....	151	119	32	.....	849	740	105	4
Total.....	640	492	145	3	360	296	62	2

## SECOND GRADE.

140-162.....	699	497	184	18	301	220	72	9
120-139.....	597	418	163	16	403	313	75	15
100-119.....	488	373	109	6	512	383	105	24
80-99.....	406	291	98	14	591	463	124	7
60-79.....	357	261	90	6	643	498	135	10
40-59.....	330	229	101	.....	670	523	142	5
20-39.....	172	138	34	.....	828	704	121	3
1-19.....	107	64	43	.....	893	808	81	4
Total.....	600	428	157	15	400	305	85	10

## FIRST GRADE.

140-162.....	545	338	217	40	405	298	92	15
120-139.....	438	238	173	27	562	435	111	16
100-119.....	358	239	106	13	642	508	105	29
80-99.....	322	213	97	12	678	567	93	18
60-79.....	204	127	62	15	796	671	110	15
40-59.....	217	145	57	15	783	669	101	13
20-39.....	155	92	53	10	845	711	124	10
1-19.....	70	54	13	3	930	826	89	15
Total.....	477	275	171	31	523	410	97	16

## ALL ELEMENTARY URBAN SCHOOLS.

140-162.....	714	512	157	15	286	223	56	7
120-139.....	537	377	148	12	463	368	85	10
100-119.....	429	316	106	7	571	459	97	15
80-99.....	413	315	92	6	587	494	86	7
60-79.....	275	210	58	7	725	615	102	8
40-59.....	260	190	64	6	740	636	99	5
20-39.....	153	113	36	4	847	745	96	6
1-19.....	99	80	19	.....	901	817	78	6
Total.....	594	449	133	12	406	331	68	7

TABLE II.—*Promotion, retardation and distribution of attendance on the basis of 1,000 for each attendance period for 1915–16—Continued.*

## B. RURAL SCHOOLS.

## FIFTH, SIXTH AND SEVENTH GRADES.

Days attended	Promotions	Years promoted pupils were in grade					Not promoted	Years non-promoted pupils were in grade			
		1 or less	2	3	4	5		1 or less	2	3	4
140-162.....	800	700	98	2			200	182	18		
120-139.....	607	411	196				393	304	80	9	
100-119.....	416	415	31				554	539	15		
80-99.....	400	400					600	540	60		
60-79.....	286	214	72				714	619	95		
40-59.....	77	51	26				923	692	231		
20-39.....	83	28	55				917	834	83		
1-19.....							1,000	952	48		
Total.....	605	513	91	1			395	347	47	1	

## FOURTH GRADE.

140-162.....	804	638	152	14			196	175	19	2	
120-139.....	647	490	141	15	1		383	293	54	6	
100-119.....	564	398	143	23			436	369	54	13	
80-99.....	463	330	129	4			537	443	84	10	
60-79.....	348	179	139	30			652	579	66	7	
40-59.....	259	143	88	28			741	629	103	9	
20-39.....	286	139	84	13			764	693	67	4	
1-19.....	94	41	41	12			906	788	106	12	
Total.....	663	506	141	16			339	292	40	5	

## THIRD GRADE.

140-162.....	772	622	136	14			228	201	25	2	
120-139.....	642	485	141	15	1		358	346	47	5	
100-119.....	515	395	112	8			485	413	66	6	
80-99.....	443	318	117	8			557	489	55	12	1
60-79.....	298	204	82	12			702	599	91	12	
40-59.....	216	161	77	8			754	616	95	13	
20-39.....	202	142	60				748	667	119	12	
1-19.....	79	67	12				921	829	75	17	
Total.....	618	503	123	12			352	304	42	5	1

## SECOND GRADE.

140-162.....	780	619	147	14			220	186	30	4	
120-139.....	691	509	164	18			309	249	53	7	
100-119.....	579	423	141	15			421	337	75	9	
80-99.....	462	337	121	4			538	424	93	21	
60-79.....	354	245	103	6			616	544	84	18	
40-59.....	293	233	53	7			707	602	92	13	
20-39.....	219	174	69	6			751	640	91	20	
1-19.....	139	97	36	6			861	773	79	9	
Total.....	678	526	139	13			322	268	47	7	

## FIRST GRADE.

140-162.....	658	343	242	71	2	1	342	239	82	20	1
120-139.....	536	264	204	65	2		464	322	116	24	2
100-119.....	405	222	136	45	2		595	450	108	35	2
80-99.....	314	201	90*	24	2		683	576	86	20	1
60-79.....	236	144	76	16			764	649	98	22	
40-59.....	218	146	56	15	1		782	692	69	21	
20-39.....	121	80	34	6		1	879	767	94	18	
1-19.....	70	39	24	7			930	804	92	34	
Total.....	498	265	179	53	1		502	387	91	23	1

TABLE II.—*Promotion, retardation and distribution of attendance on the basis of 1,000 for each attendance period for 1915–16—Continued.*

## B. RURAL SCHOOLS—Continued.

## ALL RURAL GRADES.

Days attended	Promotions	Years promoted pupils were in grade					Not promoted	Years non-promoted pupils were in grade			
		1 or less	2	3	4	5		1	2	3	4
140-162.....	731	510	183	37	1	.....	269	210	49	10	.....
120-139.....	607	391	176	38	2	.....	393	297	81	14	1
100-119.....	481	318	133	29	1	.....	519	109	87	21	2
80-99.....	378	258	103	16	1	.....	622	521	82	18	1
60-79.....	277	175	87	15	.....	.....	723	615	89	18	1
40-59.....	239	163	62	13	1	.....	761	662	82	17	.....
20-39.....	168	112	50	6	.....	.....	832	721	95	16	.....
1-19.....	87	55	26	6	.....	.....	913	802	88	23	.....
Total.....	589	403	154	31	1	.....	411	331	66	13	1

For the purpose of comparison we present herewith a table showing the per cent of promotions by grades in New York City for a series of years.

TABLE III.—*Promotions in New York City—Rate of promotion for entire February-June term*

Grades	1906	1907	1908	1909	1910	1911
1A.....	69	65	70	72	74	79
1B.....	85	82	85	86	87	91
2A.....	84	82	86	87	88	91
2B.....	85	84	87	87	88	93
3A.....	81	82	86	87	88	92
3B.....	86	84	87	88	88	93
4A.....	84	83	86	86	88	92
4B.....	85	82	86	87	88	92
5A.....	83	80	83	85	86	92
5B.....	83	81	81	85	86	92
6A.....	83	81	83	81	86	91
6B.....	83	82	85	85	90	91
7A.....	80	80	81	83	86	90
7B.....	82	81	84	85	86	91
8A.....	81	82	84	85	87	92
8B.....	83	87	88	88	91	95
Total.....	83	81	84	85	86	91

A comparison with New York City is especially valuable, as they have some of the same difficulties to contend with that we have in Porto Rico. They have part time classes; they have a language question owing to the large number of children whose mother tongue is not English; and they have the usual problems of late entries, irregular attendance and elimination. Yet the rate of promotion there is 20 per cent to 30 per cent higher than here. It will be the principal object of this bulletin to inquire into the causes of the low rate of promotions and to discover, if possible, the remedies.

TABLE IV.—*Pupils per 1,000 in each grade distributed by attendance periods.*

## A. URBAN.

Days attended	Grades								Total
	8	7	6	5	4	3	2	1	
140-162.....	714	672	684	676	672	643	640	594	644
120-139.....	61	86	74	82	96	94	107	118	99
100-119.....	30	44	42	45	47	54	56	59	52
80-99.....	55	59	47	51	50	63	51	69	58
60-79.....	45	46	61	47	41	39	44	51	46
40-59.....	38	39	35	45	37	48	51	49	45
20-39.....	27	27	31	31	35	36	31	36	33
1-19.....	27	27	26	23	22	23	20	24	23
Total .....	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000

## B. RURAL.

Days attended	Grades						Total
	5	4	3	2	1		
140-162.....	547	550	570	576	467		523
120-139.....	139	174	178	179	177		177
100-119.....	81	73	74	78	86		80
80-99.....	62	61	55	54	85		69
60-79.....	52	51	42	11	70		56
40-59.....	48	43	39	34	56		46
20-39.....	45	27	27	23	37		30
1-19.....	26	21	15	15	22		19
Total .....	1,000	1,000	1,000	1,000	1,000		1,000

*Absence and promotions.*—An examination of Table I, with reference to the number of days attended, shows that the number of absences is very great. Table IV shows the distribution of pupils according to the number of days attended and on the basis of 1,000 in each grade and 1,000 each in urban and rural schools. First, notice the number of pupils that were fairly regular in attendance; *i. e.*, those who attended for 140 to 162 days, the latter being the whole number of days in the school year. Beginning with 714 per 1,000 in the eighth grade, the number decreases with but one fluctuation to 594 in the first and an average of 644 in all urban schools; that is, 356 per thousand were absent 22 days or over. In rural schools 487 out of each thousand were absent 22 days or over. Moreover, 144 per thousand in urban schools and 147 in rural schools were absent 80 days or over—more than half the time.

Absences may be divided into three classes: those due to late entries, those due to eliminations, and those due to irregular attendance. We may gain an approximate idea of the number of pupils belonging to each of these three classes in this way. The total

number of pupils enrolled during the first month of the school year in elementary schools was 128,742. The total number enrolled during the year was 146,775. The difference, 18,033, represents the number of pupils who were a month or more late in entering school. Notwithstanding this large increase in enrollment during the year, the number belonging in school at the end of the year was only 127,342, which indicates a net loss of 1,420 during the year. Since the new enrollments during the year amounted to 18,033, the total elimination must be the sum of 18,033 and 1,420, or 19,453, besides any eliminations that may have taken place during the first month. We may, then, give an approximate classification as follows:

TABLE V.

	Pupils enrolled	No. in each 1,000 enrolled
<b>Pupils absent 22 days or over:</b>		
Late entries.....	18,033	123
Eliminations.....	19,453	132
Irregular in attendance.....	25,236	172
Total.....	62,722	427
<b>Pupils absent less than 22 days.....</b>	<b>84,058</b>	<b>573</b>
Total.....	146,775	1,000

Notwithstanding the large number of late entries, and the slightly larger number of eliminations, the variation in the total membership, or the total number belonging to the schools, was not great, as is shown by the following figures:

TABLE VI.

<b>Number belonging:</b>		
At the beginning of the year.....	128,742	
At the end of the first term.....	131,913	
At the end of the second term.....	131,635	
At the end of the third term.....	127,322	
<b>Average number belonging:</b>		
First term.....	125,816	
Second term.....	128,116	
Third term.....	125,816	
Average for the year.....	126,155	

The number belonging during the winter, when the schools were fullest, nearly 132,000, may be taken to be the approximate capacity of the schoolrooms. This makes an average of nearly 58 in each of the 2,289 schoolrooms, including rooms where two groups per day were taught, or 36 in each of the 3,680 groups (41 in urban and 33 in rural groups). From this it would appear that, notwithstanding

the large number of late entries and of eliminations, the number belonging in school is fairly uniform throughout the year. Therefore, any material diminution in the number of eliminations and late entries will result, unless the capacity of the schools is increased, in a diminution in the number of pupils that can have the advantage of at least a part of a year's schooling.

The irregularity of attendance is further shown by the average number attending for each thousand enrolled. It is, in elementary urban schools, 837; in rural schools, 775. The attendance per thousand belonging was 953 in urban and 916 in rural schools. The latter rates are high because of the fact that the base is the average number belonging instead of the total enrollment and because of the method of computing the average number belonging. Those who have been transferred to other schools or have permanently withdrawn and those who entered late are properly counted as belonging during the time of actual membership only. It is the custom also to withdraw from membership all pupils who are absent for five days or more for any cause whatever. Therefore, the aggregate number belonging differs from the aggregate attendance by the number of absences for less than five days only. The per cent of attendance thus obtained is unduly high. Pupils are absent for trivial reasons for one or two weeks as well as for one or two days. A truer index of irregularity would be obtained by retaining in the number belonging pupils who are absent for any length of time, except those who have withdrawn permanently, or for so long a time that others are admitted in their places.

If now we exclude from our computation pupils who attended less than one-half the year; *e. g.*, from 1 to 79 days, the promotions per thousand of pupils who attended 80 days and up are—eighth grade, 764; seventh, 738; sixth, 710; fifth, 737; fourth, 699; third, 698; second, 655; first, 534; total, elementary urban, 658; fifth grade rural, 703; fourth 728; third, 703; second, 725; first, 569; total, rural, 653. Moreover, if we confine our attention to the only group that can be said to have attended regularly, namely, the 140 to 162 day group, the figures are, as shown in Table II—eighth grade, 817; seventh, 797; sixth, 774; fifth, 795; fourth, 755; third, 748; second, 699; first, 595; total, urban, 714; fifth grade rural, 800; fourth, 804; third, 772; second, 780; first, 658; total, rural, 731. Comparing the number of promotions per thousand of all pupils enrolled with the promotions per thousand in the 80 to 162 day group and in the 140 to 162 day group (Table II), we have the following results:

TABLE VII.

## A. URBAN SCHOOLS.

	Grades									Total
	8	7	6	5	4	3	2	1		
<b>Promotions—</b>										
1. per 1,000 enrolled.....	684	665	638	665	637	610	600	477		594
2. per 1,000 attending 80 to 162 days.....	764	738	710	737	699	698	655	534		656
3. per 1,000 attending 140 to 162 days.....	817	797	774	795	755	748	699	595		714
Excess of 2nd over 1st.....	80	73	72	72	62	58	55	57		62
Excess of 3d over 1st.....	133	132	136	130	118	108	99	118		120

## B. RURAL SCHOOLS.

	Grades					Total
	5	4	3	2	1	
<b>Promotions—</b>						
1. per 1,000 enrolled.....	605	663	648	678	498	589
2. per 1,000 attending 80 to 162 days.....	703	728	703	725	569	653
3. per 1,000 attending 140 to 162 days.....	800	804	779	780	658	731
Excess of 2nd over 1st.....	98	65	52	47	71	64
Excess of 3d over 1st.....	195	141	124	102	160	142

Here we see plainly the increase in the rate of promotion according as the regularity of attendance increases. Certainly, it is not to be expected that pupils who attend school less than half the time will be promoted. Excluding these, we find that the rate of promotion for those who attended more than half the time is increased by 62 per 1,000 in urban schools and 64 per 1,000 in rural schools. Moreover, limiting our view to those who attended from 140 to 162 days, we conclude that if no pupils were absent for more than 22 days, the rate of promotions would be 120 per 1,000 higher in urban schools and 142 per 1,000 higher in rural schools.

Now look at the group of pupils among whom few, if any, promotions are to be expected, namely, those who attended less than half the time—1 to 79 days out of 162 days (Table I). There were 8,968 of these in urban schools, of whom 1,931, or 215 per 1,000, were promoted; and in rural schools 12,982, of whom 2,854, or 220 per 1,000, were promoted. This rate seems high for pupils who attended less than half the year; but, presumably, the greater part were pupils in groups where promotions were made during the year or repeaters, who were able to finish the work of their grade in spite of irregular attendance.

*Half-time and promotions.*—For several years the greater part of the first and second grade pupils of the urban schools of the Island

and a few in higher grades have been on half-time—three hours a day. In rural schools half-time is the rule in all grades, but in some towns full-time rural schools predominate. For the last two years the per cent of promotions in the first and second grades of urban schools and in all rural schools is as shown in the following table:

TABLE VIII.

	1914-15				1915-16			
	Urban		Rural		Urban		Rural	
	Gr. 1	Gr. 2			Gr. 1	Gr. 2		
Full time.....	58	68	59	53	62	59		
Half time.....	46	55	57	48	60	59		
Excess in full-time schools.....	12	13	2	5	2	0		

  

	1913-14							
	1st term		2nd term		3d term		Average	
	Urban		Rural		Urban		Rural	
	Gr. 1	Gr. 2	Gr. 1	Gr. 2	Gr. 1	Gr. 2	Gr. 1	Gr. 2
Full time.....	76	73	76	84	79	86	75	68
Halftime.....	76	61	71	82	73	82	76	69
Excess in full-time schools...	0	12	2	2	6	4	-1	-1
							.....	.....
							2	5
								2

In 1913-14 promotions were made by terms, and reports were made only on pupils belonging at the end of the term; hence, the higher rate of promotion.

The results are inconclusive. In the first and second urban grades the rate of promotion was slightly higher in the full-time schools, but in rural schools there is practically no difference. For the year 1916-17 a different organization has been effected. Nearly all first grades are on full-time and the number of half-time schools in the second grade is greatly reduced. The rate of promotions during 1916-17, as compared with the rate for the preceding years, ought to show conclusively the detriment, if any, to pupils who attend only half the day. But, so far, the results in Porto Rico coincide with those obtained in New York City, where the statistics on promotions indicate that pupils in part-time schools, who attend three and three-quarters out of the five hours in a school day, suffer but little detriment.

*Retardation and promotions.*—The word retardation is variously used by writer on school statistics. Therefore, it is important to define it. Bachman, writing of the schools of New York City, considers any pupil to be retarded who is over age for his grade; that is, who either does not enter the first grade before he is seven years of age or does not advance at the rate of a grade a year. Thus he considers a pupil to be retarded who does not finish the elementary school course before he is 15. Fifteen is the age when, it has been found, pupils are most liable to leave school, and it is the age when the compulsory school law ceases to apply. Therefore, if a pupil is to finish the elementary course, he must enter at six. This is an ideal condition where schools have been long established. In Porto Rico it is impossible of realization at present, since school facilities are wanting to so many children. Therefore, we consider as retarded only those pupils who fail of promotion; who fail to advance at the rate of a grade a year—the repeaters.

The following table shows the number of pupils per 1,000 in each grade who were in the grade less than a year, one two and three years, and the number promoted from each group.

TABLE IX.—*Pupils distributed according to the time spent in a grade, together with the number promoted, on the basis of 1,000 in a grade.*

A. URBAN.

Grade	Less	Pro-	One	Pro-	Two	Pro-	Three	Pro-	Total	
	than one year	moted	year	moted	years	moted	years	moted	En-	Pro-
8th.....	151	32	713	583	95	65	8	4	1,000	684
7th.....	199	64	692	532	106	67	3	2	1,000	665
6th.....	154	30	742	518	101	58	3	2	1,000	638
5th.....	181	55	682	513	131	95	3	2	1,000	665
4th.....	151	31	671	486	172	119	3	1	1,000	637
3d.....	136	37	651	455	208	145	5	3	1,000	610
2nd.....	145	43	588	385	212	157	25	15	1,000	600
1st.....	187	29	498	217	268	170	46	30	1,000	477
Total.....	163	38	617	412	201	132	19	12	1,000	594

B. RURAL.

5th.....	176	37	684	476	138	91	2	1	1,000	605
4th.....	144	36	655	471	180	110	21	16	1,000	663
3d.....	139	37	677	474	166	124	18	13	1,000	648
2nd.....	127	10	666	483	186	139	21	13	1,000	678
1st.....	208	37	414	228	270	178	75	53	1,000	498
Total.....	168	38	567	365	219	151	45	31	1,000	589

\* Four or five years in the grade.

For every 1,000 pupils in the eighth grade 154 were in the grade less than a year, of whom 32 were promoted; 743 were in the grade one year, of whom 583 were promoted; 95 were in the grade two years, of whom 65 were promoted; and 8 were in the grade three years, of whom 4 were promoted. In all elementary schools 201 were in the same grade for the second year and 19 for the third year. Therefore, 220 out of 1,000 were retarded, while in rural schools 265 per 1,000 were retarded. In both urban and rural schools the retardation is greatest in the first grade. This harmonizes with the fact of few promotions in that grade. That these figures on retardation are probably too low is indicated by the following tables obtained from retardation reports made as of the 3d of March, 1916, on pupils then belonging in school and published in Circular Letter No. 101, series of 1915-16.

TABLE X.—*Retardation of pupils belonging in school March 3, 1916.*

## A. ELEMENTARY URBAN.

Grade	Number of pupils that have been in the respective grades						Total belonging
	One year	Two years	Three years	Four years	Five years	Six years	
1st.....	8,102	4,979	969	91	13	4	11,158
2nd.....	6,726	3,078	517	68	7	1	10,397
3d.....	6,389	2,071	340	10	1	.....	8,561
4th.....	5,476	1,387	42	.....	.....	.....	6,905
5th.....	4,225	698	21	.....	.....	.....	4,994
6th.....	3,211	461	18	.....	.....	.....	3,720
7th.....	2,589	268	11	.....	.....	.....	2,868
8th.....	2,146	254	14	1	.....	.....	2,415
All grades.....	38,944	13,196	1,682	170	21	5	54,018

## B. RURAL SCHOOLS.

1st.....	17,717	12,479	3,591	531	113	18	34,449
2nd.....	14,126	5,564	755	79	6	2	20,532
3d.....	10,736	3,394	341	30	4	.....	14,505
4th.....	5,457	1,720	179	34	1	.....	7,391
5th.....	480	112	5	.....	.....	.....	597
6th.....	59	10	.....	.....	.....	.....	69
7th.....	12	1	.....	.....	.....	.....	13
All grades.....	48,587	22,280	4,871	674	124	20	77,556

These tables indicate that, instead of 220, 278 per 1,000 were retarded in urban schools and in rural schools 374, instead of 265. The discrepancy between the retardation reports and the promotion reports as of the end of the year is not wholly explicable. In the retardation reports attention was confined to the one item of the number of years in the grade. In the promotion reports pupils were

also distributed according to the number of months' attendance and according to whether they were promoted or not. Mistakes were, therefore, more liable to occur in the latter case. In Table XI, on page 380 of the report of the Commissioner of Education for 1915, we find that 15,705 out of 66,028, or 238 per 1,000, were retarded in urban schools and 33,132 out of 92,287, or 359 per 1,000, in rural schools. From the three tables it seems certain that the number of retarded pupils in urban schools is not less than 220 per 1,000 and in rural schools not less than 265; probably more. That is, 220 pupils out every 1,000 in elementary schools were in their respective grades for the second, third, and up to the sixth year.

Now let us consider the rate of promotions in these different groups.

## PROMOTION AND RETARDATION.

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TABLE XI.—Distribution of pupils according to the number of years spent in the respective grades and the number and per cent promoted.

## A. URBAN GRADES.

Grades	One or two terms	Promoted No.	Promoted % of class	One year		Promoted Two years		Promoted Three years		Promoted Four years		Promoted Five years		Promoted Six years		Promoted		
				No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
				No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
8	436	89	22	2,108	1,558	78	269	183	68	21	12	57	1	.....	.....	.....	.....	
7	624	201	32	2,120	1,617	76	335	211	62	7	5	71	1	.....	.....	.....	.....	
6	661	130	21	3,054	2,220	73	431	250	58	12	9	75	1	.....	.....	.....	.....	
5	1,031	310	30	3,756	2,818	75	733	532	73	13	10	77	1	.....	.....	.....	.....	
4	1,165	238	21	5,094	3,644	72	1,318	914	69	29	9	45	1	100	1	.....	.....	
3	1,334	357	27	6,273	4,389	69	2,029	1,419	70	47	31	66	1	43	1	.....	.....	
2	1,684	500	30	6,795	4,448	65	2,799	1,819	65	286	170	59	1	67	1	1	100	
1	3,042	477	16	8,102	4,002	49	4,355	2,771	64	746	482	66	14	3	2	1	100	
Total.....	9,967	2,302	23	37,214	24,666	66	12,269	8,099	66	1,152	788	64	16	7	44	4	2	100

## B. RURAL GRADES.

Grades	One or two terms	Promoted No.	Promoted % of class	One year		Promoted Two years		Promoted Three years		Promoted Four years		Promoted Five years		Promoted Six years		Promoted		
				No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
				No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
5	142	30	21	550	383	70	111	73	66	2	1	50	1	100	1	100	1	100
4	1,192	302	25	5,394	3,888	72	1,496	1,160	78	173	132	76	1	100	1	100	1	100
3	2,318	592	27	10,682	7,447	70	2,658	1,985	75	279	199	71	6	67	6	67	6	67
2	2,840	902	32	14,692	10,664	73	4,146	3,097	75	487	298	65	1	100	1	100	1	100
1	8,143	1,435	18	17,350	8,933	51	10,562	6,985	66	2,917	2,086	70	90	61	18	20	17	85
Total.....	14,535	3,361	22	48,668	31,295	64	18,973	13,300	70	3,838	2,696	70	98	66	67	20	17	85

The rate of promotion among pupils who had been in their respective grades only one or two terms is remarkably high in all grades except the first, both urban and rural. It is more than 20 per cent in urban and 22 per cent in rural schools. Furthermore, of the 9,967 urban pupils who had been in their respective grades one or two terms, 4,337 had been in the grade only one term; and of these, 563, or nearly 13 per cent, were promoted. In rural schools 12 per cent of the 5,935 pupils who had been in the grade only one term were promoted. These promotions can be explained in the case of pupils who did part of the work of the grade outside the public schools and in the case of precocious pupils; but some reports are probably erroneous. Of pupils who spent one year in the grade, from 70 per cent to 78 per cent were promoted in most grades; in the first grade, about 50 per cent. Of pupils who were two years in the grade, in all urban schools the rate of promotion was the same as for those who belonged in the grade only one year, but in grades 4 to 8 the rate is less by 6 per cent on the average; in the sixth, seventh and eighth grades, by 15 per cent, 13 per cent and 10 per cent, respectively. This points to the elimination of retarded pupils. That is, in the higher grades pupils who drop behind their grade are more liable to leave school. Failure discourages them. The rate of promotion of first-grade pupils of the two-year group is not much below the average for the whole group and is much higher than in the one-year group. This suggests a different cause for the retardation of first-grade pupils. Comparing the rate of promotions in the first grade of urban schools with the rate in the 1A grade in New York City covering the first half year—for promotions are made there semi-annually—we find that there is a still greater difference in New York City than in Porto Rico between the rate in the first grade and the average for all grades. The average for five years in the 1A grade in New York is 698 per 1,000, or 139 less than the rate for all grades. In Porto Rico the rate in the 140 to 162 day group of the first grade is 595, or 119 less than the average of this group for all grades, and in the whole grade it is only 117 less than the average for all grades. The comparison is not exact since in New York the figures cover the first half year only, but it at least shows that the smaller rate of promotion in the first grade is a condition not peculiar to Porto Rico. It is due in part to greater irregularity of attendance and more late entries. Most of the new enrollments in the third term are made in the first grade to fill the gaps made by elimination. We have seen in Table IX that in grade 1 the number of pupils in

each 1,000 who were not absent more than 22 days is 594, while in all urban schools it is 644. In all other attendance periods the figures are highest in the first grade. This shows more absences in the first grade than in any other. Table IX also shows a larger proportion of pupils belonging in the first grade only one or two terms—187 per 1,000 in grade 1 and 163 per 1,000 in all urban schools; in rural schools 208 in the first grade and 168 in all grades. Immaturity is usually assigned as a reason for the lower rate of promotion in the first grade. Table XII gives the distribution, by ages, of the pupils of the first grade in Connecticut in 1903 and in Porto Rico in 1913, 1915 and 1916, on the basis of 1,000 in the grade.

TABLE XII.—*Pupils of the first grade distributed on the basis of 1,000 in the grade.*

Ages	Connecticut 1903	Porto Rico		
		1913	1915	1916
5.....	226	94	36	28
6.....	349	196	186	171
7.....	247	231	212	264
8.....	112	188	208	225
9.....	35	113	123	123
10.....	16	95	105	101
11.....	7	37	45	42
12 and over.....	8	46	55	46
Total.....	1,000	1,000	1,000	1,000

A glance is sufficient to show that the age of first-grade pupils is much higher in Porto Rico than in Connecticut. It has been increasing since 1913, owing to the lack of accommodations and the preference given to older pupils in making enrollments. So far, then, as age is a measure of maturity, if the ages of children are correctly reported in Porto Rico, first-grade pupils are not immature. But there is reason for believing that ages are largely estimated. In the age-grade tables published in the Commissioner's annual reports for the past ten years, ages represented by even numbers preponderate over those represented by odd numbers. There are more pupils reported at 8 years of age than at either 7 or 9; more at 10 than at either 9 or 11. When ages are estimated, it is more natural to choose the even numbers. Moreover, it is easy to overestimate ages for the purpose of getting children admitted to school. Whether the heritage of illiteracy of former centuries has rendered many of the children immature for their years, is a question that has not yet been investigated.

## OVERSIZE SCHOOLS AND PROMOTIONS.

TABLE XIII.—*Number of pupils enrolled in full-time urban schools, grades 3-8, who were not absent more than 22 days.*

	In schools of—		Total
	45 or less	46 or more	
No. enrolled .....	7,729	14,120	21,849
No. promoted .....	6,161	10,757	16,918
Per cent promoted.....	79.7	76.2	77.4

It is not possible from reports at hand to make an accurate classification of schools as of normal size and oversize, since the promotion reports give the entire enrollment instead of the number belonging, which is the proper basis for this classification. We have fixed upon 45, arbitrarily, as the limit for schools of normal size; but since the average number belonging in the elementary urban schools is 86 per cent of the total enrollment in those schools, an enrollment of 45 means an average number belonging of 39. It is safe to say, therefore, that schools tabulated in the first column are not oversize. In those schools having an enrollment of 45 or less, or approximately an average number belonging of 39 or less, the per cent of promotions is 3.5 higher than in schools having an enrollment of 46 or more, or an average number belonging of 40 or more.

*The course of study and promotions.*—Since so large a proportion of pupils, even of those who attend regularly the whole year, fail to pass, the question suggests itself whether the course of study is adapted to the pupils. Or, has the effort been made to adapt the pupils to a previously conceived course of study? It is often said that the high-school course is determined by college entrance requirements and that the elementary-school course is determined by the requirements for entering high school. Then, it has been assumed that the amount of knowledge, the amount of training required to enter high school is to be acquired in eight years. Now, since college entrance requirements have greatly increased in the past twenty-five years, more work has been put upon both elementary and secondary schools. Their work has been still further augmented by the effort to make the course of study fuller and completer. Still, the elementary course has remained nominally eight years in length. The low rate of promotions, or the large number of retarded pupils, suggests the query whether in practice the course is really eight years in length. Can average normal pupils complete the course in eight

years of regular attendance, or do they require a longer time? Our tables furnish valuable evidence on this point. They show the number of years that pupils had to spend in the grades they were in last year before being promoted. (See Tables IX and XI.) This information should be supplemented by information in regard to the number of years pupils have been in school. Table I furnishes data which, by a simple computation, show that the average time spent by promoted pupils in each of the grades before being promoted is 1.20 years in urban schools and 1.32 years in rural schools. In this computation no account has been taken of pupils who, because of retardation or for other reasons, were eliminated.

*Conclusions and recommendations.*—The object of the present inquiry is to discover the causes of the low rate of promotions and to suggest remedies. They may be summarized as follows:

1. *Absence.*—The first and most important cause is absence due to (a) late entrance, (b) elimination, and (c) irregular attendance. We have seen in Table VII that the rate of promotion for all pupils enrolled in urban schools is 594 per 1,000; for those who were absent less than half the time, 656 per 1,000; and for those who were absent 22 days or less, 714 per 1,000. In rural schools, the corresponding figures are 589, 653, and 731 per 1,000.

One remedy for late entrance is being applied this year; that is, the opening of the rural schools of certain districts in July instead of September, so that the harvest months will fall in the three months' vacation between the first and second terms. This will enable the boys of those districts to be in school the entire year instead of beginning late. Reports just received show that the expectation of a larger attendance in these summer rural schools has not been realized this year, perhaps because they are an innovation.

Absence for any of the three causes named above may be reduced by enforcing the compulsory attendance law between the ages of 8 and 14.

2. *Half time.*—The extent to which half-time classes are responsible for retardation cannot be determined from the statistics of the last three years. In the first and second grades of urban schools, the per cent of promotions in full-time groups is from 2 to 13 per cent higher than in half-time groups; in rural schools, full-time groups show a rate of promotion 2 per cent higher than half-time groups, two out of three years, while last year there was no difference. Other factors entering in may produce varying results. The poorer teachers may be assigned to the smaller schools, which are on

full time, while the better teachers are assigned to the more difficult task of teaching two groups of 40 to 50 pupils each. Moreover, the number of pupils on full time in those grades where half time is the rule is so small that they do not form a fair basis of comparison. In the first grade, urban, 3 per cent were on full time last year; in the second grade, 12 per cent; and in all rural schools, 6 per cent. Schools have opened up in September, 1916, with 91 per cent of the first grade and 48 per cent of the second grade urban, and 11 per cent of rural schools on full time. Therefore, there will be a nearly equal basis for comparison in the second grade; in the first, the rate of promotion among the 91 per cent on full time this year can be compared with the rate among the 97 per cent on half time last year; and in rural schools the proportion of pupils on full time has been nearly doubled and they can be compared to better advantage with those on half time.

3. *Retardation*.—We have seen in Table XI that in the first grade the rate of promotion is higher among retarded pupils than among those who complete that grade in one year; in the second and third grades, the rate is about the same for the two classes of pupils, while in grades 4 to 8 the rate is lower for retarded pupils by about 6 per cent. Discouragement and the necessity of going to work cause many to leave during the second year in the grade. Others remain in school and, if not successful in finishing the grade at the end of the second year, still further clog the system, so that, according to Table X, of pupils in school the 3d of March, 1916, 6,553 pupils were in elementary schools for the third year, 844 for the fourth year, 145 for the fifth, and 25 for the sixth year. But practically all of those who were retarded more than two years were in the first three grades. These pupils need special investigation to discover physical and mental deficiencies, and special classes should be opened for them where practicable.

4. *Oversize schools*.—The size of schools has been materially diminished by departmental regulation in the last two years, limiting the enrollment preferably to 40 and in all cases to 50; in half-time schools to 40 in each session. But there were still 160 rural schools that on December 20, 1915, had a membership of 80 to 100 or more. At the beginning of 1916-17 there are 58 full-time urban schools of more than 50 and 37 half-time urban schools of more than 80, eight of the latter having 100 or more; 61 rural schools have more than 80 in the two sessions, nine of them more than 100, and one, 124.

5. *Course of study*.—This is being constantly revised with a view

to adapting it more perfectly to the needs of Porto Rico. In doing this, the chief consideration should not be the requirements for entering college or high school in the States, but the question, How much ground can the average normal Porto Rican boy or girl who attends school regularly cover satisfactorily in view of the bilingual method of instruction and his heritage of intelligence?

6. The bilingual system of instruction as a hindrance to promotion is not discussed here since "The Problem of Teaching English to the People of Porto Rico" has already been ably treated by Mr. José Padín in Bulletin No. 1 of this series.





